

SMOLYANOV, O.G.

Topology of the inductive limits of infinite sequences of linear
topological spaces satisfying the first axiom of countability.
Vest. Mosk. un. Ser. 1: Mat., mekh. 20 no.1:26-29 Ja-F '65.
(MIKA 18:4)

1. Kafedra teorii funktsiy i funktsional'nogo analiza Moskovskogo
universiteta.

SMOLYANOV, O.G.

Locally convex topologies in K-space and certain other spaces of
finite functions. Vest. Mosk. un. Ser.1: Mat., mekh. 20 no.3:5-
11 My-Je '65. (MIRA 18:9)

1. Kafedra teorii funktsiy i funktsional'nogo analiza Moskovskogo
gosudarstvennogo universiteta imeni M.V.Lomonosova.

SMOLYANOV, S.

Mechanize time-consuming operations. Prom.koop.ne.3:30 Mr '56.
(MLRA 9:7)

1.Zamestitel' predsedatelya Khar'kovskogo oblshveypremsoyuza.
(Khar'kov--Clothing industry)

YERSHEVICH, V.V., inzh.; SMOLYANOV, V.S., inzh.; PALANT, V.M., inzh.

Use of voltage regulation under load in 35 and 110 kv.
power transformers. Elek. sta. 35 no.2:47-51 F '64.
(MIRA 17:6)

VERSHINSKII, V.P.; SMOLYANOV, V.S.

Special features of the use of autotransformers. Energ. i
elektrotekh. prom. no.31:27-31 JI-S '62. (MIRA 18,11)

I. Khar'kovskoye otdeleniye Vsesoyuznogo gosudarstvennogo
proyektchnogo instituta stroitel'stva elektrostantsii.

31745
S/204/61/001/004/002/005
E075/E185

53620

AUTHORS:

Volynskiy, N.P., Gal'pern, G.D., and Smolyaninov, V.V.

TITLE:

Preparation of sulphides and sulphoxides by the action of thionyl chloride on mixed organomagnesium compounds

PERIODICAL: Neftekhimiya, v.1, no.4, 1961, 473-481

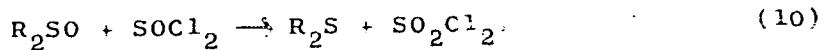
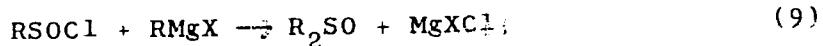
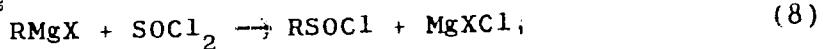
TEXT: A number of sulphides and sulphoxides were prepared in connection with investigations of sulphur compounds of middle fractions of petroleum. The action of thionyl chloride on organomagnesium compounds was studied as a method of preparation of sulphides and sulphoxides. The reactions with the following organomagnesium compounds were studied: isoamyl-, phenyl-, cyclohexyl-, and α -naphthylmagnesium bromide and, also, decylmagnesium chloride. In this way the sulphides were prepared bypassing the stage of mercaptan formation. More detailed study of the reaction with isoamyl- and phenylmagnesium bromide showed that increase in the ratio of moles of thionyl chloride and the magnesium bromide compound from 1:3 to 1:1 leads to an increase

Card 1/ 4

Preparation of sulphides and ...

31745
S/204/61/001/004/002/005
E075/E185

of yields of the sulphides and a decrease of yields of the corresponding sulphoxides. In the experiments in which the reagents were added in the reverse order (ethereal solution of isoamylmagnesium bromide added to ethereal solution of thionyl chloride) diisoamyl sulphide was obtained in place of sulphoxide. The formation of sulphoxide took place when there was no excess of thionyl chloride, or at low temperatures with efficient stirring of the reaction mixture. From the study of the reaction it is concluded that the synthesis of sulphides proceeds in three stages as follows:



It was shown that the organomagnesium compounds do not react with the sulphoxides not only under the conditions of the synthesis of the sulphides (0 to -10 °C), but also at room temperature.

Card 2/4

31745

S/204/61/001/004/002/005
E075/E185

Preparation of sulphides and ...

On the other hand it was shown that sulphoxides, in contrast to anhydrides of chlorosulphurous acids, can be converted very easily with thionyl chloride to sulphides, the speed of conversion of dicyclohexylsulphoxide considerably exceeding that of diphenylsulphoxide. Depending on the conditions of the conversion of thionyl chloride various quantities of chlorine containing products were formed, but were not studied in this work. By reacting thionyl chloride with a mixture of two organomagnesium compounds with different organic radicals a number of mixed sulphates were obtained; decylcyclohexyl-, phenyl- α -naphthyl- and cyclohexyl- α -naphthylsulphides. In addition didecylsulphide was obtained from decylchloride and dia-naphthylsulphoxide from α -bromonaphthalene. It was not possible to convert dia-naphthylsulphoxide into the corresponding sulphide by the reaction with thionyl chloride. Diisoamyl-, didecyl- and dicyclohexylsulphide were oxidized under standard conditions with hydrogen peroxide to the corresponding sulphoxides.

There are 1 table and 24 references; 8 Soviet-bloc and 16 non-Soviet-bloc. The four most recent English language references read as follows:

Card 3/4

X

Preparation of sulphides and ...

31745
S/204/61/001/004/002/005
E075/E185

Ref. 14: B.S. Wildi, T.W. Taylor, H.A. Potratz. J. Amer. Chem. Soc., v. 73, 1951; C.A., v. 46, 1482

Ref. 16: F.G. Bordwell, B.M. Pitt. J. Amer. Chem. Soc., v. 77, 5727, 1955.

Ref. 19: W. Davey, E.D. Edwards. Wear, I, 291, 1957. C.A., v. 52, 15040.

Ref. 21: M.S. Kharasch, A.F. Zavist. J. Amer. Chem. Soc., v. 73, 964, 1951; C.A., v. 45, 7950.

ASSOCIATION: Institut neftekhimicheskogo sinteza AN SSSR
(Institute of Petrochemical Synthesis, AS USSR)

SUBMITTED: June 21, 1961

Card 4/4

VOLYNSKIY, N.P.; SMOLYANINOV, V.V.

Formation of tetra- and pentathionates in the reaction of acids with thiosulfates in the presence of some organic bases salts. Zhur. ob. khim. 33 no.5:1456-1461 My '63.
(MIRA 16:6)

(Pentathionic acid) (Tetrathionic acid)

VOLYNSKIY, N.P.; SMOLYANINOV, V.V.

Preparation of N-alkyl pyridinium, N-alkyl quinolinium, and
dimethylalkylphenyl ammonium chlorides. Zhur. ob. khim. 33
no.5:1461-1462 My '63. (MIRA 16:6)

(Pyridinium compounds)
(Quinolinium compounds)
(Ammonium compounds)

VOLYNSKIY, N.P.; GAL'PERN, G.D.; SMOLYANINOV, V.V.

Obtaining alkyl (aryl)-naphthyl sulfides by the action of thionyl chloride on mixed organo-magnesium compounds. Neftekhimi 4 no.3:370-373 My-Je '64. (MIRA 18:2)

1. Institut neftekhimicheskogo sinteza AN SSSR im. A.V. Topchiyeva.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001651720018-0

BERKINBLIT, M.B.; KOVALEV, S.A.; SMOLYANINOV, V.V.; CHAYLAKHYAN, L.M.

Inlet resistance of syncytial structures. Biofizika 10 no.2:309-316
'65. (MIRA 18:7)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001651720018-0"

BEL'YAKOV, V.P., BULAVIN, A.I., CHAYKIN, I.M.
Determination of basic electric characteristics of the myocardium

of the frog's ventricle. Biophysika 10 no.5-861-867 '65.

Characteristics of the distribution of potential in syncytial
connective tissue. Ibid., 883-885 (MIRA 18:10)

Upravleniye biologicheskoy fiziki AN SSSR, Moskva.

ZHIGUN'YA, L.G.; DVORKIN, G.A.; BROGOLANOV, V.V.

Anomalous dispersion of the optic activity of nucleic acids and
nucleotides. Dokl. AN SSSR 198 no.2:451-454 My '65. (MIKAI 1845)

z. Institut biologicheskoy fiziki AN SSSR. Submitted July 6, 1964.

BERKINELIT, M.B.; KOVALEV, S.A.; SMOLYANTINOV, V.V.; CHAYLAKHYAN, L.M.

Electric structure of the myocardial tissue. Dokl. AN SSSR 163 no.3
740-744 JI '65. (MIRA 18:7)

1. Institut biologicheskoy fiziki AN SSSR. Submitted August 22, 1964.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001651720018-0

ARMENAKYAN, Yu.I.; DZIKHINITY, M.P.; KIVALEV, G.A.; SHALYANTIKY, V.Y.;
CHATLAKHIAN, L.V.

Role of dendrites in the functioning of nerve cells. Dokl. Akad. Nauk.
163 no.4:894-897 Ag 1965. (NIKA 1808)

I. Institut biologicheskoy fiziki AN SSSR. Submitted August 11, 1964.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001651720018-0"

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001651720018-0

DECEASED

SMOLYANOVA, R. I.

1964

c. 1962

MEDICINE-STOMATOLOGY
DISEASES OF MOUTH

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001651720018-0"

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001651720018-0

SMOL'YANOV, VADIM ALEKSANDROVICH

Story of a letter. Radio no.4:5-7 Ap '61.
(Radio)

(MIRA 14:7)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001651720018-0"

SHEVCHENKO, V.A., kand. tekhn. nauk; SMOL'YANINOV, Yu.G.; FELLER, M.N.

Penetration of water vapor into wood through protective varnish
coatings. Bum. i der. prom. no.4:36-40 O-D '64 (MIRA 18:2)

Central Biolog Sci

Golikovskaya, ...

Dissertation: "Oxidative-Resistant Varieties of Gram-negative bacteria of the
Flexner group."

13 April 4

All-Union Sci Res Chemical-Pharmaceutical Inst imeni Sergei Frishenikidze.

SO Vecheryaya Moskva
Sum 71

C.A.

Action of *p*-aminosalicylic acid on tuberculous bacteria
A. Z. Serebryanskaya (Moscow Univ. Tuber. Inst.) /
Problemy Tuber. 1950, No. 6, 56-8.—Cultures of human
and bovine tuberculous bacteria are rapidly inhibited by
0.0001-0.0001% PASA; acid-resistant saprophyte strains
were affected but little. Expts. with guinea pigs showed
definite growth of resistance of the bacteria to the drug (in a -
3 month expt. the effective concn. rose to 0.1-1.0%).
G. M. Kosolapoff

SMOLYANSKAYA, A.Z., kandidat biologicheskikh nauk.

Combined effect of chemotherapeutical preparations upon *Mycobacterium*
tuberculosis. Probl.tub. no.6:35-38 N-D '53. (MIRA 6:12)

1. Iz Moskovskogo gorodskogo nauchno-issledovatel'skogo tuberkuleznogo
instituta (direktor - professor V.L.Eynis).
(Tuberculosis) (Chemotherapy)

SMOLYANSKAYA, A.

Microorganisms

Resistance of microbes. Nauka i zhizn' 20, No. 2, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

SMOLYANSKAYA, A.Z., kandidat biologicheskikh nauk.

Antibiotics in agriculture. Nauka i zhizn' 20 no.9:9-10 S '53.

(MLRA 6:11)
(Antibiotics)

MIKHAILOV, F.A.; SMOLYANSKAYA, A.Z. (Moskva)

Transmission of Mycobacteria tuberculosis from patient to patient.
Klin.med. 34 no.12:7-11 D '56. (MLRA 10:2)

1. Iz Moskovskoy gorodskoy tsentral'noy tuberkuleznoy bol'nitsy
(glavnnyy vrach V.L.Eynis)
(TUBERCULOSIS, transmission
prev. with isoniazid)
(ISONIAZID, ther. use
prev. of tuberc. transm.)

SMOLYANSKAYA, A.Z.

Testing the resistance of tuberculosis to chemotherapeutic
preparations [with summary in French]. Probl.tub. 36 no.3:84-88
'58 (MIRA 11:5)

1. Iz Moskovskoy gorodskoy tsentral'noy klinicheskoy tuberkuleznoy
bol'nitsy (glavnyy vrach - prof. V.L. Eynis).
(MYCOBACTERIUM TUBERCULOSIS, eff. of drugs on
various chemother. agents, on resist. (Rus))

SMOLYANSKAYA, A.Z.

Interrelation of the catalase and peroxidase activity of Mycobacterium tuberculosis resistant to antibacteriological preparations. Probl. tub. 36 no.8:74-79 '58. (MIRA 12:7)

1. Iz Moskovskoy gorodskoy tsentral'noy klinicheskoy tuberkuleznoy bol'-nitsy (glavnnyy vrach - prof. V. L. Eynis)
(MYCOBACTERIUM TUBERCULOSIS) (CATALASE)
(PEROXIDASE) (BACTERIA, EFFECT OF DRUGS ON)

SMOLYANSKAYA, A.Z.

Problem of oxidation processes and fermentative activity of tuberculous mycobacteria. Lab.delo 5 no.4:35-40 .1-159. (MIRA 12:12)

1. Iz Moskovskoy gorodskoy tsentral'noy klinicheskoy tuberkuleznoy bol'nitsy (glavnnyy vrach - prof. V.L. Eynis).
(MYCOBACTERIUM TUBERCULOSIS)

VUL', S.M.; SMOLYANSKAYA, A.Z.; STEPANCHONOK, G.I.

Reaction of diffuse precipitation in agar in tuberculosis. Lab.
deleno 7 no. 2:40-43 F '61.
(MIRA 14:1)

1. TSentral'naya klinicheskaya tuberkuleznaya bol'nitsa i Institut
epidemiologii i mikrobiologii imeni N.F. Gamalei AMN SSSR, Moskva.
(MYCOBACTERIUM TUBERCULOSIS)
(ANTIGENS AND ANTIBODIES)

SMOLYANSKAYA, A.Z.; TARASOVA, O.V.

Viability of Mycobacterium tuberculosis from the tuberculosis
foci in incised lung sections. Lab.delo 7 no.11:3-5 N '61.
(MIRA 14:10)

1. Moskovskaya gorodskaya tsentral'naya klinicheskaya tuberkuloznaia bol'nitsa.
(TUBERCULOSIS) (VITALITY)

SMOLYANSKAYA, A.Z.; MOREYN, Ye.M.

Role of secondary microflora in tuberculosis. Zhur.mikrobiol.epid.i
immun. 33 no.5:45-50 My '62. (MIRA 15:8)

1. Iz Moskovskoy gorodskoy tsentral'noy klinicheskoy tuberkuleznoy
bol'nitsy. (TUBERCULOSIS)

SPYANOVSKAYA, A.Z.; MOROZH, Ye.M.

Significance of secondary infection in the surgical treatment
of pulmonary tuberculosis. Probl. tub. no.2:84-88 '65.
(MIRA 18:12)

I. Tser'ts' l'naya klinicheskaya tuberkuleznaya bol'nitsa
(glavnyy vrach - prof. V.L.Kynis), Moskva.

INFLUENZA VIRUS, H1N1.

PA 12/1972

ICMR/Medicine - "Influenza," Terms
Medicine - "Epidemiology"

"Characteristics of the Influenza Epidemics," S.N. Chitrokovich, C.P. Peterson, P.V. Cholpanov, Clinical Inst of Virology, Acad Sci UkrSSR, at Children's Home No. 27, 4 pp

"Pediatrics" No. 7

Studied two outbreaks of epidemic influenza in same group of children of preschool age. Epidemiological study of both outbreaks indicate that type A influenza virus was more virulent than type B. Observed catarrhal phenomena less often in type B. Irritation of respiratory nervous system occurred more often in type A.

PA 12/1972

LUKHTAN, I.V.; SMOLYANSKAYA, L.M. [Smolian's'ka, L.M.]; IL'CHENKO, P.F.;
SHUSTER, S.I.; SHATAYKIN, S.P.; BOKSERMAN, Ye.I. [Bokserman, YE.I.];
CHIZHMAKOVA, V.P. [Chyzhmakova, V.P.]

Use of ammonia soap for the fat-liquoring of stiff leather. Leh.
(MIRA 1957)
prom. no. 2559 Ap-Js '64

CHIZHMAKOVA, V.P.; BOKSERMAN, Ye.I.; SMOLYANSKAYA, L.M.

Improving the quality of liquid tanning extracts by means of their
treatment with the NF dispersing agent. Kozh.-obuv.prom. 6 no.11:23-
24 N '64. (MIRA 18:4)

SMOLYANSKAYA, P.G.

cc

A micromethod for the nephelometric determination of hydrogen sulfide by means of a photoelement. Yu. B. Pronin and P. G. Smolyanskaya. *Dokl. i Zh. Mikrohim. Met. Anal. Vod.* (U.S.S.R.) 12, No. 14, 88-107; *Khim. Referat. Zhur.* 1, No. 8-9, 138 (1938). — To analyze air contg. H₂S it is passed through an ammoniacal soln. of Ag₂SO₄. Expts. showed that Ag₂S absorbs more light than the sulfides of Hg or of Pb. The absorption increases with temp. For best results the expts. should be performed at room temp., although no appreciable changes were observed between 10 and 30°. The suspension of Ag₂S (after standing for 1.5-2 hrs.) is examd. in a photometric colorimeter. The galvanometer is calibrated by means of suspensions of known concn. With a 10-cm. tube the sensitivity of the detn. is about 0.1 μ 20 ml. of the soln. With the use of "blue" light filters, through which only the short waves can pass, the sensitivity is increased to 0.03 μ . The time required to pass the air through the soln. is 3-5 min., and the detn. itself requires no more than 3 min. This method is highly specific because other Ag salts are sol. in NH₃, and by it air can be examd. continuously and automatically for H₂S. W. R. Henn

ASW SLA METALLURGICAL LITERATURE CLASSIFICATION

SMOLYANSKAYA, P.G.; KOGAN, T.M.

Photocolorimetric method for the determination of the activity of
adoniside. Med.prom. 14 no.2:46-48 F '60. (MIRA 13:5)

1. Leningradskiy khimiko-farmatsevticheskiy institut i Leningradskiy
khimiko-farmatsevticheskiy zavod No.1.
(COLORIMETRY) (ADONIS)

SMOLYANSKAYA, P.G.; KOGAN, T.M.

Photocolorimetric method of determining the activity of adonis
extract. Med.prom. 14 no.3:42-44 Mr '60. (MIRA 13:6)

1. Leningradskiy khimiko-farmatsevticheskiy institut i Lenin-
gradskiy khimiko-farmatsevticheskiy zavod No.1.
(COLORIMETRY) (ADONIS)

SMOLYANSKAYA, P.G.; KOGAN, T.M.

Photocolorimetric method for determining the glycosides in Adonis.
Med.prom. 14 no.4:41-42 Ap '60. (MIRA 13:6)

1. Leningradskiy khimiko-farmatsevticheskiy institut i Lenino-
gradskiy khimiko-farmatsevticheskiy zavod No.1.
(COLORIMETRY) (ADONIS) (GLYCOSIDES)

SMOLYANSKAYA, P. G., CAND CHEM SCI, "PHOTOCOLORIMETRIC
METHODS FOR DETERMINING SMALL CONCENTRATIONS OF TOXIC MAT-
TER IN PHARMACEUTICAL PREPARATIONS." LENINGRAD, 1961.
(TARTU STATE UNIV). (KL, 3-61, 201).

SMOLYANSKAYA, P.G.

Method for detecting small quantities of morphine in pharmaceutical
preparations. Trudy Len.khim.-farm.inst. no.13:268-278 '62.
(MIRA 15:10)

1. Kafedra fizicheskoy i kolloidnoy khimii Leningradskogo
khimiko-farmatsevticheskogo instituta (zav. kafedroy - dotsent
V.N.Ivanov).
(MORPHINE)

SMOLYANSKAYA, P.G.; GUSTAVINA, L.M.

Photocolorimetric detection of morphine in an opium-benzoin infusion.
Trudy Len.khim.-farm.inst. no.13:279-282 '62. (MIRA 1, 10)
(MORPHINE) (COLORIMETRY)

1. Leningradskiy Khimiko-farmatsevticheskiy institut.

2. Content of anthraquinone derivatives in the bark of alder buckthorn.
Report No. 1. Part one. L no. 369-372 '65.

(MFA 18:10)

3. Leningradskiy Khimiko-farmatsevticheskiy institut.

SMOLYANSKII, A.

Technical training rooms. Avt. transp. 36 no.2:19 F '58. (MIRA 11:2)

1. Glavnnyy inzhener Avtotransportnoy kontory No.4 avtotresta
Glavkiyevstroya. (Automobile drivers)

SMOLYANSKIY, A. L.

1
002

✓ 1061. Dielectric losses of polytetrafluoroethylene.
G. P. MIKHAILOV, S. P. KABIN, and A. L. SMOLYANSKIY. *Zhur. tekhn. fiz.*, 1955, 25, 2179-82. M1
E.R.A. Abz., 1956, No. 833, abs. 8. In investigation of the dielectric characteristics of polytetrafluoroethylene dielectric relaxation losses of an activation energy of 19 kcal/mol were observed, due to relaxation processes in the amorphous parts of the polymer. At t = 20°C the relaxation time is of the order of 10^{-9} sec. The relaxation time calculated from data on the dielectric losses of the polymer agrees with the relaxation time for mechanical losses at ultrasonic frequencies. 382H2421.3443

(2)

AS 1992

21136
S/130/61/003/004/011/014
3101/5207

15 1960 2200.1372, also 1043.1477

AUTHORS: Katin, S. P., Melkovich, S. G., Mikhaylov, G. P., Gashin, R. I.
Stolyanskiy, A. L., Cherezhkevich, L. V.

TITLE: Study of the dielectric losses and polarization of some fluoroplasts

PERIODICAL: Vysoekomolekulyarnyye soyuzineniya, v. 3, no. 4, 1961, 616-623

TEXT: This paper studies the effect of crystallization upon the dielectric constant ϵ and $\tan \delta$ of the dielectric losses. Substances with the following parameters were studied:

Substance: Denotation d_{25° , S/cm^3 $\epsilon, 10^5$ cps, $\tan \delta, 10^5$ melting
 $^\circ\text{C}$ cps, $^\circ\text{C}$ point, $^\circ\text{C}$

polyvinylidene fluoride	F-2	1.86	7.0	0.19	180
copolymer from tetrafluoroethylene and					
fluorovinylidene 1:4 CF-1		1.86	6.4	0.16	145

Cards 17#

21136					
S/19C/61/C03/004/011/014					
B101/B207					
Study of ...	Denotation	d_{100}, cm^3	$\epsilon, 10^5 \text{ cps}$	$\tan \delta, 10^2 \text{ melting}$	
Substance		°C	cps	cps, 100°	point, °C
ditto, ratio	CF-2	1.91	8.6	0.03	160
ditto, ratio	CF-3	1.96	8.0	0.08	205
ditto					

ϵ and $\tan \delta$ were measured between -150°C and melting point of the polymer at frequencies of $1-10^7$ cps on 0.1-0.5 mm thick samples according to a method described in Ref. 1 (G. P. Mikhaylov, B. I. Sashin, Vyssokomol. sovrem., 1, 1, 1959; Zh. tekhn. fiz., 15, 2166, 1959). The maximum error was less than 10%. Fig. 1 shows ϵ and $\tan \delta$ as a function of temperature. The maxima occurring therein which are caused by relaxation, were also observed when $\tan \delta$ was a function of frequency. Since tetrafluoroethylene has a small dipole moment, the increase of ϵ and $\tan \delta$ symmetrical molecule with small dipole moment, the increase of ϵ and $\tan \delta$ in the copolymer, is due to the polarity of vinylidene fluoride. Three ranges of dielectric losses owing to relaxation were observed. 1) High-frequency relaxation at CF-2 and CF-3 in the range of from -150- -100°C

Cards 2/4

21136

S/TC/61/COR/CCO/011/014
3107/307

Study of ...

(max. of tan δ); 2) medium-frequency relaxation in all substances investigated, in the range of freq -10 to -50°C , and 3) low-frequency relaxation at -100 to -200°C in all substances. Experiments carried out with barium CF- β -alumina showed a falling of high-frequency relaxation and a rise of middle-frequency relaxation as compared to the non-harzined polymer. Fig. 4 shows the frequency of the maximum of high-frequency and medium-frequency relaxation as a function of $1/T$. The discussion of the experimental data led to the following conclusions: 1) The dielectric properties in the range of freq -100 to -200°C cannot be explained by relaxation only. The structural transformation must also be taken into account. 2) The maxima of low-frequency relaxation lie close to the melting point of the polymers concerned, thus due to thermal motions in the crystalline phase. 3) The dielectric losses decreasing with the degree of crystallization of the copolymers. 4) Orientation of polymers, i.e., increase of the degree of crystallization, may be accompanied by a considerable increase of δ . There are 4 figures, 1 table, and 11 references; 6 Soviet-bloc and 4 non-Soviet-bloc. The 2 references in English-language publications read as follows: W. S. Conroy et al., Nature, 208, 543, 1955; A. H. Willbourn, Trans. Faraday Soc., 51, 717, 1955.

Card-3/7

SMOLYANSKIY, A.L.

Obtaining thin films of polymers and measuring their thickness.
Prib.i tekhn.eksp. 6 no.5:200 S=0 '61. (MIRA 14:10)

1. Vologodskiy molochnyy institut.
(Films (Chemistry))

SMOLYANSKIY, A.L.

Using infrared spectra as a basis for determining the hydrogen
bonding energy of isobutyric acid in solutions. Opt. i
spektr. 13 no.4:475-479 O '62. (MIRA 16:3)
(Isobutyric acid) (Hydrogen bonding)
(Spectrum, Infrared)

MIKHAYLOV, G.P.; SMOLYANSKIY, A.L.

Use of infrared spectra in the study of molecular interaction in
polymers and their hydrated monomers. Part 1: Hydrated monomers
and copolymers. Opt. i spektr. 15 no.4:471-477 O '63.
(MIRA 16:11)

S/0051/63/015/006/0766/0771

ACCESSION NR: AP4009459

AUTHOR: Mikhaylov, G.P.; Smolyanskiy, A.L.

TITLE: Investigation of molecular interaction in polymers and their hydrogenated monomers by observation of infrared spectra. 2. Polymers

SOURCE: Optika i spektroskopiya, v.15, no.6, 1963, 766-771

TOPIC TAGS: infrared spectrum infrared absorption, carbonyl group, polymethylacrylate, polyethylacrylate, polybutylacrylate, polymethylmethacrylate, polyethylmethacrylate, polybutylmethacrylate, polyvinylacetate, molecular interaction, hydrogenation, polymer chain, polymer linkage, ester group.

ABSTRACT: In the preceding paper by the authros (G.P.Mikhaylov and A.L.Smolyanskiy, Opt.i spektr.15,471,1963) there were presented the results of investigation of the absorption band of the carbonyl group in a number of esters representing hydrogenated acrylates and methacrylates and copolymers of these with styrene. It was shown that the changes in the spectra parameters of the C=O absorption band in going from the hydrogenated monomers to the copolymers, in which the concentration of ester groups approaches zero, are not connected with specific differences between the

Card 1/32

AP4009459

monomer links in the copolymer chains from small molecules, i.e., from molecules of hydrogenated monomers. The present work was devoted to investigation of the molecular interaction in acrylate and methacrylate polymers and polyvinyl acetate. To this end there were investigated the infrared absorption bands of the carbonyl group with the polymers in the bulk state and in benzene and chloroform solutions. The variations in the spectra are described and the spectral parameters of the C=O band ($\sim 1730 \text{ cm}^{-1}$) are tabulated. The molecular interaction in the polymers is discussed on the basis of comparison of the spectra parameters of the C=O band of the polymers with the spectral characteristics of the band in the spectra of the corresponding hydrogenated monomers and copolymers with styrene. It is concluded that the alterations observed in the spectra are due to the influence of the force field of the monomer link in the polymer chain on the vibrations of the carbonyl group. The results of the investigation are in agreement with the data of other studies of the same systems by the method of dielectric polarization and measurement of dipole moments. "In conclusion we desire to express our deep gratitude to L.L.Burshteyn, G. S.Denisov and V.N.Nikitin for their constant interest in the work and discussions." Orig.art.has: 3 formulas, 3 figures and 2 tables.

Card 2/3

S, b 24 No - 6 E

SMOLYANSKIY, A.V., kandidat tekhnicheskikh nauk

On new types of passenger train locomotives. Tekh.zhel.dor. 6
no. 8:103 Ag¹⁴⁷. (MIRA 8:12)
(Locomotives)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001651720018-0

SMO. - 100% - 100% - 100% - 100%

100% - 100% - 100% - 100% - 100% - 100% - 100% - 100% - 100%

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001651720018-0"

SMOLYANSKIY, B.L.

Hygienic significance of the manganese content of food served at
Pioneer camps and at a trade school. Trudy ISGMI 45:25-28 '58
(MIRA 11:11)

1. Kafedra gigieyny pitaniya Leningradskogo sanitarno-gigiyenicheskogo
meditsinskogo instituta (zav. kafedroy dots. Z.M. Agranovskiy).
(MANGANESE--PHYSIOLOGICAL EFFECT)
(NUTRITION)

SMOLYANSKIY, B.L.

Effect of ascorbic acid on the functional state of the adrenal cortex in elderly persons. Terap. arkh. 35 no.1:71-77 Ja'63.
(MIRA 16:9)

1. Iz kafedry gigiyeny pitaniya s klinikoy alimentarnykh zabolеваний (zav. - prof. Z.M. Agranovskiy) i kafedry prope-devtiki vnutrennikh bolezney (zav. - chlen-korrespondent AMN SSSR prof. S.M.Ryss) Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.
(ADRENAL CORTEX) (ASCORBIC ACID)
(GERIATRICS)

SMOLYANSKIY, B.L.

Vitamin C concentration in the organism of elderly and senile persons. Vop.pit. 24 no.3:23-26 My-Je '65.

(MIRA 18:12)

1. Klinika alimentarnykh zabolеваний pri kafedre gigiyeny pitaniya (zav. - prof. Z.M.Agranovskiy) i kafedra propedevtiki vnutrennikh zabolеваний (zav. - chlen-korrespondent AMN SSSR prof. S.M.Ryss) Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta. Submitted July 3, 1964.

L 31002-66 EWT(1) SCTB DD
ACC NR: AP6008101 (A)

SOURCE CODE: UR/0244/66/025/001/0079/0081

AUTHOR: Smolyanskiy, B. L.; Kharakhorkina, K. D.; Moiseyeva, M. V.

ORG: Chair of Nutrition Problems (Kafedra gigeny pitaniya); Clinic of Alimentary Diseases, Leningrad Sanitation-Hygienic Medical Institute (Klinika alimentarnykh zabolеваний Leningradskogo sanitarno-gigenicheskogo meditsinskogo instituta)

TITLE: Chemical composition and ascorbic acid content in vegetables grown in soil and by the hydroponic method

SOURCE: Voprosy pitaniya, v. 25, no. 1, 1966, 79-81

TOPIC TAGS: plant chemistry, plant growth

ABSTRACT: This study was undertaken in order to fill a gap in the literature on the comparative nutritive values of vegetables grown in soil and by the hydroponic method. The study was made at a Leningrad Oblast sovkhoz. The hydroponic test series was based on a medium of inert keramzit or quartz gravel containing calcium, phosphorous, magnesium, potassium, sodium, nitrogen, iron, zinc, copper, etc. Specimens of tomatoes, cucumbers, cauliflower, green onions and parsley (grown simul-

Card 1/2

UDC: 613.262:577.164.2

Card 2/2 LC

SMOLYANSKIY, B.P., rentgenotekhnik

Attachment for making vertical pictures of the lungs with the
URDd-105-X4 X-ray machine. Vest.rent. i rad. 33 no.4:68 Jl-Ag '58
(MIRA 11:8)
(LUNGS, radiography
appar. for vertical pictures (Rus))

SMOLYANSKIY, B.P. (Penza)

Work on modernizing the Ovoshchnikov tomofluorograph. Letter to the
editor. Vest. rent. i rad. 34 no.4:97-98 Jl-Ag '59. (MIRA 12:12)
(X RAYS--EQUIPMENT AND SUPPLIES)

SMOLYANSKIY, G.B., dotsent

Water flow as a thermal factor. Gig.i san. 26 no.12:73-77 D '61.
(MIRA 15:9)

1. Iz kafedry obshchey gigiyeny Stalinskogo meditsinskogo
instituta imeni A.M.Gor'kogo.
(HYDRAULICS) (WATER--THERMAL PROPERTIES)

SMOLYANSKIY, G.B.

heat exchange in man as an example and Report No. 1:
Principles of water movement in heat exchange. Top. kur., fizioter.
i. Izh. fiz. kul't. no.6:517-521 '63. (MIRA 17:8)

1. Iz knyazev gryazevi detay i podrostkov (izpolzuyushchiy
objektivnosti zaregulyavshego .. dotsent G.B. Smolyanskiy)
Pochetnogo meditsinskogo instituta imeni A.M. Gor'kogo.

SMOLYANSKIY, M. I.
MOSCOW, USSR (USSR), (M. I.).

Mos., Lab. Surface Forces, Inst. Phys. Chem., Dept. Chem. Sci., Acad. Sci., -1946-.
Cand. Chemical Sci. "A Triborutic Method of Measuring Adsorption on a Solid Solution
Interface. Applications to the Study of Absorbed Layers," Dok. Ak. Nauk, 54, No. 3, 1946.

DANIAGIN, B. V.

1. DERYAGIN, B. V.; SMOLYANSKIY, M. L.
2. USSR (600)
4. Physics and Mathematics
7. Introduction to the Physics of Peat, N. N. Kulakov. (Moscow-Leningrad, State Power Press, 1947). Reviewed by B. V. Deryagin and M. L. Smolyanskiy, Sov. Kniga, No. 10, 1948.
9. [REDACTED] Report U-3081, 16 Jan. 1953, Unclassified.

PISKUNOV, Nikolay Semenovich; SMOLYANSKIY, M.L., redaktor; MURASHOVA, N.Ya.,
tekhnicheskiy redaktor

[Differential and integral calculus for higher technical schools]
Differentsial'noe i integral'noe ischislenie; dlja vtuzov. Moskva,
Gos.izd-vo tekhniko-teoret. lit-ry, 1957. 844 p. (MIRA 10:8)
(Calculus, Differential) (Calculus, Integral)

LAVRENT'YEV, Mikhail Alekseyevich; SHABAT, Boris Vladimirovich; SMOLYANSKIY,
M.L., red.; GAVRILOV, S.S., tekhn. red.

[Methods in the theory of functions of a complex variable] Metody
teorii funktsii kompleksnogo peremennogo. Izd.2., perer. Moskva,
Gos. izd-vo fiziko-matematicheskoi lit-ry, 1958. 678 p.

(MIEA 11:9)

(Functions of complex variables)

PHASE I BOOK EXPLOITATION SOV/1125

Problemy kibernetiki, vyp. 1 (Problems of Cybernetics, no. 1)
Moscow, Fizmatgiz, 1958. 268 p. 20,000 copies printed.

Ed. (title page): Lyapunov, Aleksey Andreyevich; Ed. (inside book):
Smolyanskiy, M.L.; Tech. Ed.: Kolesnikova, A.P.; Eds. and Com-
pilers: Lulanov, O.B., Pil'chak, B.Yu., Kulagina, O.S.,
Yablonskiy, S.V.

PURPOSE: The book is intended to relate the interests of scientific
and engineering personnel whose work involves various aspects of
cybernetics.

COVERAGE: This collection of articles deals with general problems of
cybernetics, information theory, theory of algorithms and automatic
machines, theory of control systems, theory of games and tactics,
methods of operations analysis, problems in the theory of cal-
culating machines, programming, and the application of cybernetics
to other sciences, such as biology, economics and linguistics.
"Problems of Cybernetics", as a recurrent publication, will continue
to include original papers, survey articles and translations and,

Card 1/4

Problems of Cybernetics, no. 1

SOV/1128

like the present work, will contain the results of seminars in cybernetics held at Moscow University. There are 107 references, of which 104 are Soviet, 2 English and 1 Hungarian.

TABLE OF CONTENTS:

From the Editors	4
I. GENERAL PROBLEMS	
Lyapuov, A.A. On Some General Problems of Cybernetics	5
Tsetlin, M.L. Nonprimitive Systems	23
II. PROGRAMMING	
Lyapunov, A.A. Logical Systems of Programming	46
Yanov, Yu.I. Logical Systems of Algorithms	75
Podlovchenko, R.I. Basic Notions on Programming	128
Card 2/4	

Problems of Cybernetics, no. 1	SOV/1128
Kanynin, S.S., Lubimskiy, E.Z., and Shura-Bura, M.R. Automation of Programming with the Aid of a Data Processing Program	135
Lukhovitskaya, E.S. Logical Processing Unit in the PP-2	172
Lyubimskiy, E.Z. Arithmetical Unit in the PP-2	178
Kamynin, S.S. Re-addressing Unit in the PP-2	182
Shtarkman, V.S. Economy Unit for Operating Locations in the PP-2	185
III. CALCULATING MACHINES	
Mikhaylov, G.A., Shchitikov, B.N., and Yavlinskiy, N.A. Digital Electronic Computer TsEM-1	190
IV. PROBLEMS OF MATHEMATICAL LINGUISTICS	

Card 3/4

Problems of Cybernetics, no. 1	SOV/1128
Kulagina, O.S. A Method of Determining Grammatical Concepts on the Basis of the Theory of Sets	203
Moloshnaya, T.N. Discrimination of Homonyms in the Machine Translation of English to Russian	215
Mel'chuk, I.A. Machine Translation From Hungarian to Russian	222
V. RECENT EVENTS	
Seminars in Cybernetics at Moscow University	265
Scientific and Technical Conference on Cybernetics	266
AVAILABLE: Library of Congress	

JP/nah
2-24-59

Card 4/4

SmoLyankin, M.L.

16(1) PHASE I BOOK EXPLOITATION

SOV/2508

Matematicheskoye Prosvetitel'noye, matematika, reye prepodavaniye,
Matematicheskaia literatura, vyp. 4 (Mathematical Education;
Mathematics, Its Teaching; Application and History, Nr. 4)
Moscow, Gosizdat, 1959. 15,000 copies printed.

Ed. I. N. Bronstein, Editorial Board of Series: I. N. Bronstein,
A. I. Markushhevich, I. M. Yaglom, Tech. Ed.; S. N. Achilov.

PURPOSE: This book is intended for persons without an extensive
mathematical education who are interested in trends in contemporary
mathematics. The book may be useful to high school
mathematics teachers.

COVERAGE: The book consists of articles, reviews, and scientific
and methodological reports, some of which are translations from
other languages. The state of modern mathematics is covered,
including applications, history, teaching of mathematics in
schools, and mathematical developments in the USSR and abroad.
One section deals with scientific and pedagogical life in the
USA and another contains reviews of certain mathematical publications.
Some mathematical background is necessary to understand
the book; certain articles require a knowledge of higher mathematics.

Mathematical Education: (Cont.)

SOV/2508

4. Without the Use of Cardan Formulas
5. Two Tests of Divisibility by Any Odd Number
Not Ending in 5

IV. SCIENTIFIC AND PEDAGOGICAL CHRONICLE

Naribin, P.P. The 16th Conference of Mathematics Departments of
Pedagogical Institutes in the Ural Region
Sokolnitskii, M.I. Meeting of Teachers of Correspondence Pedagogical
Institutes of the RSFSR
Talai, L.V. On the Joint Scientific-Methodological Seminar of
the Mathematics Departments of Moscow Vtuzes
Innovations in Mathematical Science
I. Muchnik, A.A., and R. Prud'evs. The Problem of the
Recursiveness of Enumerable Sets

227
213
219
227
233
Card 68

FUKS, Boris Abramovich; SHABAT, Boris Vladimirovich; SMOLYANSKIY, M.L.,
red.; YERMAKOVA, Ye.A., tekhn.red.

[Functions of complex variables and their applications] Funktsii
kompleksnogo peremennogo i nekotorye ikh prilozheniya. Izd.2.
Moskva, Gos.izd-vo fiziko-matem.lit-ry, 1959. 376 p. (MIRA 12:5)
(Functions of complex variables)

LIKHTMAN, V.N.; SMOLYANSKIY, M.L.

Lubricants containing surface-active agents in powder metal production and their stabilizing (anticorrosive) effect. Uch. zap. MGZPI no.3:262-273 '59. (MIRA 13:5)
(Surface active agents) (Powder metal processes)
(Lubrication and lubricants)

SOLY IV, I.P. (Soviet)

Professor of teacher in the correspondence-course section of the
U.S.S.R. educational institutes. Mat.pros. no.4:219-225 '59.
(NIM 12:11)

(Mathematics--Congresses)

BESKIN, Leonid Nikolayevich; SMOLYANSKIY, M.L., red.; TATURA, G.L.,
tekhn.red.

[Stereometry; a manual for teachers of secondary schools]
Stereometriia; posobie dlja uchitelei srednei shkoly. Moskva,
Gos.uchebno-pedagog.izd-vo M-va prosv., 1960. 239 p.
(MIRA 13:6)

(Mensuration)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001651720018-0

SMOLYANSKIY, Mark L'vovich; ROZOV, N.Kh., red.; LIKHACHEVA, L.V.,
tekhn. red.

[Tables of indefinite integrals] Tablitsy neopredelennykh in-
tegralov. Moskva, Gos.izd-vo fiziko-matem.li-tyr, 1961. 108 p.
(MIRA 15:2)
(Integrals)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001651720018-0"

SMIRNOV, V.I., otv. red.; BUROV, V.N., red.; VORONOVSKAYA, Ye.V., red.; LOZINSKIY, S.M., red.; NATANSON, G.I., red.; RYMARENKO, B.A., red.; FAYNSHAIKT, V.L., red.; SMOLYANSKIY, M.L., red.; MURASHOVA, N.Ya., tekhn. red.

[Studies on modern problems in the constructive theory of functions] Issledovaniia po sovremenym problemam konstruktivnoi teorii funktsii; sbornik statei. Moskva, Gos.izd-vo fiziko-matem. lit-ry, 1961. 368 p. (MIRA 15:1)
(Functional analysis)

BARANENKOV, G.S.; DEMIDOVICH, B.P.; YEFIMENKO, V.A.; KOGAN, S.M.; LUNTS,
G.L.; PORSHNEVA, Ye.F.; SYCHEVA, Ye.P.; FROLOV, S.V.; SHOSTAK,
R.Ya.; YANPOL'SKIY, A.R.; UGAROVA, N.A., red.; SIOLYANSKIY, M.L.,
red.; BRUDNO, K.F., tekhn. red.

[Problems and exercises in mathematical analysis for schools of
higher education] Zadachi i uprachneniya po matematicheskому ана-
лизу для втузов. Izd. 2., ispr. Moskva, Gos. izd-vo fiziko-
matem. lit-ry, 1961. 472 p. (MIRA 14:8)
(Mathematical analysis—Problems, exercises, etc.)

SKOPETS, Zalman Alterovich; ZHAROV, Viktor Aleksandrovich; SHOLYANSKIY,
M.L., red.; ZYKDEA, T.N., tekhn. red.

[Problems and theorems in geometry(plane); a textbook for
students of pedagogical institutes] Zadachi i teoremy po geo-
metrii (planimetriia); posobie dlja studentov pedagogicheskikh
institutov. Moskva, Uchpedgiz, 1962. 161 p. (MIRA 15:10)
(Geometry---Problems, exercises, etc.)

MISHCHENKO, Ye., red.; SMOIYANSKIY, M.L., red.; AKSEL'JOD, I.Sh.,
tekhn. red.

[Survey papers presented at the International Congress on
Mathematics] Obozornye dokladы Mezhdunarodnogo matematicheskogo
kongressa v Edinburge 1958 g. Pod red. E.F. Mishchenko. Mo-
skva, Fizmatgiz, 1962. 276 p. (MIRA 15:11)

1. International Congress of Mathematicians, Edinburgh, 1958.
(Mathematics--Congresses)

MISHCHENKO, Ye.F., red.; SMOLYANSKIY, M.L., red.; AKSEL'ROD, I.Sh.,
tekhn. red. [REDACTED]

[International Congress of Mathematicians held in
Edinburgh in 1958] Mezhdunarodnyi matematicheskii kon-
gress v Edinburge, 1958 g.; obzornye doklady. Moscow,
Fizmatgiz, 1962. 276 p. Translated from the English, French
(MIRA 16:9)
and German.

1. International congress of mathematicians, Edinburgh,
1958.

(Mathematics--Congresses)

LEVITAN, Boris Moiseyevich; SMOLYANSKIY, M.L., red.; YERMAKOVA, Ye.A.,
tekhn. red.

[Generalized displacive operators and some of their applications]
Operatory obobshchennogo sdviga i nekotorye ikh primeneniia. Mo-
skva, Gos. izd-vo fiziko-matem.lit-ry, 1962. 323 p.
(MIRA 15:5)

(Operators (Mathematics))

SMOLYANSKIY, M. L.

S/137/63/000/003/004/016
A006/A101

AUTHORS: Likhtman, V. I., Smolyanskiy, M. L.

TITLE: Physico-chemical phenomena in pressing and sintering of powder metals

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1963, 47, abstract 30297 ("Uch. zap. Mosk. gos. zaochn. ped. in-t", 1962, no. 9, 46 - 62)

TEXT: The authors stress the importance of studying the nature of changes in the contact surface of sinters during pressing and sintering, for the purpose of explaining their properties. Brief information is given on the basic regularities in the effect of the surface-active greases upon plastic deformation processes of the metal. To study changes in the contact surfaces the method of electric conductivity was employed. It is shown with Cu and Fe powders that in the presence of surface-active lubricants (a solution of oleic acid in benzene or vaseline oil), contact surfaces increase much more rapidly at higher pressure than in pressing powders without lubricants. An addition of surface-active greases reduces the magnitude of elastic expansion of the briquets after pressing.

Card 1/2

Physico-chemical phenomena in pressing and...

S/137/63/000/003/004/016
A006/A101

Surface-active greases increase the corrosion resistance of metallic powders. Changes in the contact surfaces during sintering were studied on Cu-briquets and take place in 3 stages. At stage no. 1, as a result of relaxation of residual stresses, one portion of the contacts breaks down - electric conductivity decreases. During stage 2 the oxides are reduced and the non-metallic contacts become metallic - electric conductivity sharply increases. The second stage of sintering is simulated on thin Cu films. During stage 3 collective recrystallization inside and between the particles takes place - electric conductivity varies slightly. Burning out of surface-active greases produces high concentration of the reducing agent and promotes a more accelerated reduction of oxides than without surface-active lubricants. There are 18 references.

O. Padalko

[Abstracter's note: Complete translation]

Card 2/2

SMOLYANSKIY, M.L.; LIKHTMAN, V.I.

Effect of the medium on the strength of metals. Uch. zap.
MGZPI no.9:90-95 '62. (MIRA 16:6)

(Strength of materials)

SMOLYANSKIY, Mark L'vovich; ROZOV, N.Kh., red.; MIKHLIN, E.I.,
tekhn. red.

[Tables of indefinite integrals] Tablitsy neopredelennykh
integralov. Izd.2., ispr. Moskva, Fizmatgiz, 1963. 111 p.

(MIRA 16:4)

(Integrals)

BOZANOV, Yuriy Anatol'yevich; SMOLYANSKIY, M.L., red.; LIKHACHEVA, L.V., tekhn. red.

[Stationary random processes] Statsionarnye sluchainye protsessy. Moskva, Fizmatgiz, 1963. 284 p.
(MIRA 16:11)
(Random processes)

SMOLYANSKIY, Mark L'vovich; ROZOV, N.Kh., red.

[Tables of indefinite integrals] Tablitsy neopredelen-
nykh integralov. Moskva, Nauka, 1965. 111 p.
(MIRA 18:8)

LAVRENT'YEV, Mikhail Alekseyevich; SHABAT, Boris Vladimirovich;
SMOLYANSKIY, M.L., red.

[Methods in the theory of functions of complex variables]
Metody teorii funktsii kompleksnogo peremennogo. Izd.3.,
ispr. Moskva, Nauka, 1965. 716 p. (MIRA 18:6)

SMOLYANSKIY, M.L.; KYVKIN, A.Z., red.; GASTEV, Yu.A., red.

[Some problems in modern mathematics and cybernetics;
collection of articles for mathematics teachers] O ne-
kotorykh voprosakh sovremennoi matematiki i kibernetiki;
tiki; sbornik statei v pomoshchi uchiteliu matematiki.
Moskva, Prosvetshchenie, 1965. 530 p. (MIRA 18:7)

Smolyansky N.A.

Sov/2773

NAME & BOOK INFORMATION

Poluprovodnikovye termoprovodimy; Sovetskaya (the author); Collection, Polygraphoizdat (the publisher); Moscow, Gosizdatpol, 1959. 259 p. 15,000 copies printed.

ED. (title page): B. B. Smolyanov, Doctor of Technical Sciences, Professor; M. A. (author); V. A. Petrov, Tech. Ed.; G. I. Matveyev, Editor-in-Chief; B. P. B. Smolyanov, Doctor of Technical Sciences, Professor (Chief Ed.), B. P. Smolyanov, Candidate of Technical Sciences, M. S. Tsvetkov, Radiotekhnika, Elektronika, Radioelektronika, and V. I. Turmukas, Engineer.

PURPOSE: This collection of articles is intended for engineers and students of technical personnel of plants, GAKh, KII and also universities and colleges of manufacture of various types. This book contains articles dealing with problems of manufacture of thermistors and determining thermistor parameters and characteristics. The author also discusses the problem of industrial application of thermistors as sensors and determining thermistor parameters by calculation of a central element. In book is an effort of cooperation by scientists of a number of works, universities or KII and engineers of one of the plants (name is not given) of Radioelectronics. No personalities are mentioned. References appear at the end of some articles.

153.

REFERENCE: Calculation of Parameters of Measuring Bridge Circuits

Smolyanov, N. A. Calculation of bridge elements with
etch thermistors - a method of calculating bridge elements with
etch thermistors. The author discusses a method of temperature measuring devices. There are no
references.

155

Some Advantages of Thermistor Heat Detector Cells in

Measuring Temperature or Thermistor Heat Detector Cells in
Circuits. The author discusses the advantages of thermistor heat detector cells.
The author discusses the advantages of devices for measuring temperature
over wide resistance changes in devices for calculating parameters of a high-
current bridge. He also describes a method of calculating parameters of a high-
current bridge. There are 6 references, all Soviet.

156

Determination of a Coefficient of Thermal Inertia for

Airflowmeter and Air Flow Rate Meter
Thermistors and Air Flow Rate Meter
The author discusses a method of determining the coefficient of thermal inertia for T-1 and T-3 types of thermistors under the condition of motion of the media. She also describes an air flow meter operating at various temperatures and densities. There are no references.

158

Low-Inertia Thermistor
Level Indicator
The author discusses an experimental device for controlling and
monitoring the level of liquids and dense substances. There are no
references.

173

REFERENCES FOR Superhigh Frequencies

Abrosimov, M. I. Thermistors for Superhigh Frequencies
The author discusses thermistors used in the oscillator bands for
measuring superhigh-frequency power and describes methods of
eliminating the error of measurement, of decreasing amplitudes of
high-frequency oscillations and calibrating errors, as well as methods of
increasing electrical stability and the coefficient of heat trans-
fer. There are 6 references, all Soviet.

182

Thermoregulator Using TGSN Thermistors

Smolyanov, M. A. Thermoregulator of automatic temperature regulators
The author discusses circuits of automatic temperature regulators
used in bread-making industry and presents recommendations for
regulator manufacture. There are no references.

184

Smolyanov, M. A. Use of Thermistors for Compensating Thermocouple Error
The author discusses a method of compensating the error of technical
temperature measurement due to temperature difference of the thermocouple alloy.
He also explains a method of calculating parameters of compensation line.
There are 5 references, all Soviet.

circuits containing thermistors. There are no references.

J.SOLYANSKIY A.B.

BABSKIY, Ye.B.; SMOLYANSKIY, N.A.

Electrodynamographic method of measuring of maximum stress and
fatigue in isometric contraction of muscles in man. Biul. eksp.
biol. i med. 37 no.6:68-70 Je '54. (MIR 7:8)

1. Iz laboratorii fiziologii (zav. deystvitel'nyy chlen AN USSR
prof. Ye.B.Babskiy) TSentral'nogo nauchno-issledovatel'skogo insti-
tuta protezirovaniya i protezostroyeniya.
(MUSCLES, physiology
force, electrodynamographic measurement)

MOREV, N.Ye.; SHUL'TS, I.A.; KOMAROV, V.V.; SMOLYANSKIY, N.A.; SOKOLOV, A.G.

Mechanized TsNIKHP-ML2-59 make production line with a daily capacity up to 15 tons of hearth bread weighing from 0,4 to 1,2 kg a piece. Trudy TSNIKHP no.8:5-10 '60. (MIRA 15:8)
(Bakers and bakeries--Equipment and supplies)
(Assembly-line methods)

MOREV, N.Ye.; SHUL'TS, I.A.; SMOLYANSKIY, N.A.; ITSKOVICH, Ya.S.

Mechanized TsNIKHP-ML-4-59 make continuous production line
with a daily capacity of 5 tons for making small-sized baked
products. Trudy TSNIKHP no.8:15-20 '60. (MIRA 15:8)
(Bakers and bakeries—Equipment and supplies)
(Assembly-line methods)

MOREV, N.Ye.; SHUL'TS, I.A.; KOMAROV, V.V.; SMOLYANSKIY, N.A.;
SOKOLOV, A.G.

Equipment for the mechanization of manual processes in the
production of cracknel baked products. Trudy TSNIIKHP no.8:20-
28 '60. (MIRA 15:8)
(Bakers and bakeries--Equipment and supplies)

24(6)

SOV/37-28-10-6/40

AUTHORS:

Smolyanskiy, R. Ye., Gurevich, V. M., Raykhlin, A. M.,
Lukasevich, M. I.

TITLE:

Investigation of the Industrial Etching of the Surface of Mono-crystalline Germanium Previous to Fusing With Indium
(Issledovaniye promyshlennogo travleniya poverkhnosti monokristallicheskogo germaniya pered vplavleniyem v nego indiya)

PERIODICAL: Zhurnal tekhnicheskoy fiziki. Vol 28, # 10, pp 2135-2141 (USSR)

ABSTRACT:

This is an investigation of the industrial etching of germanium after cutting and polishing. It was carried out by means of electron diffraction analyses (as suggested by the authors of reference 1) and by means of micrographs: The results are as follows: 1) It is possible to advance an eventual mechanism of the etching of germanium in an alkaline agent, for which an optimum composition is given: $8 \div 10 \text{ cm}^3$ 25% NaOH per 1000 cm^3 30% H_2O_2 . 2) It was found that a film of GeO_2 remains on the germanium surface after etching in an alkaline agent, which does not dissolve. It is, however, easily removable by rinsing the etched germanium in hot distilled water. 3) In order to in-

Card 1/3

SOV/57-2 - 10-6/40

Investigation of the Industrial Etching of the Surface of Monocrystalline Germanium Previous to Fusing With Indium

crease the efficiency of the etching process it is recommended to rinse the germanium samples between subsequent etching treatments. 4) When germanium is sawed through with steel saw blades a disturbed layer results with a thickness of 90 μ . 5) Considerations are presented bearing on the difference in the absorption capability of germanium surfaces etched with alkaline agents and of such etched with adhesive agents. A treatment with the latter results in an increase of the probability of a physical sorption of gases. The existence of ions promotes the sorption of moisture. 6) Recommendations are presented concerning the choice and the uniformity of etching processes of the source germanium and of the finished p-n junctions with respect to the type of apparatus which is to incorporate the transistors.

The electron diffraction unit of the Institut kristallografii AN SSSR (Institute of Crystallography AS USSR) in the laboratory of Professor Z. G. Pinsker was used for the electron diffraction analyses. There are 10 figures, 1 table, and 7 references, 4 of which are Soviet.

Caro 2/3

Investigation of the Industrial Etching of the Surface of Monocrystalline
Germanium Previous to Fusing with Indium

Date: December 17, 1957

Chart 1/5